

## HOW WE BECOME ACID

### The development of latent "acidosis"

<http://members.iimetro.com.au/~hubbca/euroamerican4.htm>

If we look for common denominators to all diseases, factors that make any disease you have worse, then correcting these factors will help and perhaps cure, whatever is wrong with you.

The fact is, every disease begins, at a cellular level, with those particular cells becoming acid, toxic, polluted. Since the internal environment or internal milieu the cells live in effects all diseases, this is the best place to start, no matter what is wrong with you.

The acid/base balance or lack thereof in this internal milieu, is easy to evaluate. Simply, you measure how acid your saliva and urine are, at home. This will be explained thoroughly under Urine and Saliva Testing and as stated this is an exceedingly useful tool in following your own health.

## HOW WE BECOME ACID

First, I would like to describe what a latent "acidosis" is and how we get into such a condition. Then I'll go into some detail about the significance of this as the changes that happen in our body as our cells become acid are profound. Chronic Degenerative Disease is what develops and is what this is all about.

### pH

How acid something is determined by measuring its pH. The pH of anything is set on a scale of from 1 to 14. pH 1 is the most acid, like the acid in your car battery. pH 14 is the most basic, like the lye you spray in an oven to clean it.

Water is supposed to be neutral at a pH of 7.0. The pH of the blood has to remain exactly 7.40, all the time...exactly. If the blood's pH rises or falls one tenth of a pH unit you are in intensive care in the hospital where the pH of your blood is monitored very carefully. If it moves two tenths either way it is lethal.

How the blood always maintains a constant pH is a very complex matter and one that everything in the body helps to maintain, as everything in the body depends on this sameness. Healthy blood just transports things, in and out. It doesn't change in composition itself, it can't and be healthy.

As hospital medicine is only concerned with serious illnesses, this is the only place in regular medicine that pH is taken seriously. Arterial blood pH is measured frequently in intensive care because here the pH of the blood itself does change. This is considered a real acidosis, as compared to a latent one, and is a very serious condition.

As far as preventative, or regular day-to-day medicine is concerned, these concepts are completely disregarded by modern allopathic doctors. Because this process of becoming acid correlates directly with the onset of old age and the development of chronic degenerative disease, it becomes more important, in a way, to deal with it first as an 'outpatient', than as a patient in the hospital.

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### Strong Acids, Weak Acids and Protein

The strong acids in our bodies are those that are formed by the degradation of protein. These are sulfuric acid, phosphoric acid and nitric acid. These are strong, like the battery acid in your car. Strong acids are strong in contradistinction to weak acids such as vinegar and citrus juices. Weak acids do not ionize (break apart completely) when in solution, whereas strong acids do. This is why vinegar does not burn holes in your clothes, or dissolve your bones; it does not break apart completely into an acid and a base part, it remains partly a salt. A salt is formed when an acid and a base combine and neutralized each other.

In fact, vinegar, although an acid when you eat it, does not stay that way. Weak acids like the acetic acid in vinegar, tartaric acid and the acids in most fruits and lemons, contain lots of minerals which are basic, along with their weak acid part. The weak acid part combines with water and is converted into carbonic acid which then breaks apart into carbon dioxide and water. You breathe out the carbon dioxide and pass the water out through your kidneys. The minerals remain behind to replenish deficient minerals so in fact these weak acids in the end, alkalinize the body by adding more minerals to it.

The opposite happens with the excretion of strong acids, as they take out or leach minerals out of the body.

This is where the problem lies.

### The Main Reason We Become Acid Is From Over-consumption Of Protein

When protein breaks down in our bodies, it breaks down into the above mentioned strong acids. These three acids must be excreted by the kidneys because they contain sulfur, phosphorus or nitrogen which cannot break down into water and carbon dioxide to be eliminated as the weak acids can. In their passage through the kidneys these strong acids must take a basic mineral with them

eliminated as the weak acids are. In their passage through the kidneys these strong acids must take a basic mineral with them because in this way they are converted into their neutral salts and don't burn the kidneys on their way out as would happen if these acids were excreted in their free acid form.

Sulfuric acid or any of the strong acids are excreted mainly as the salts of sodium, potassium, magnesium or calcium as these are the main basic minerals of the body, the ones that are the most plentiful. The sulfur in sulfuric acid can and does combine with the calcium in your bones for one and is excreted as the corresponding salt which is called calcium sulfate. This salt does not harm the kidneys on its way through them but it does rob the body of the needed basic calcium.

By taking all these basic minerals out of the body you make the body relatively more acid. A latent "acidosis" develops then because the body becomes relatively base deficient. Becoming BASE DEFICIENT is the same as becoming acid, right? Latent "acidosis" is not the frank or real acidosis (so the quotes) of hospital medicine because the pH of the blood itself does not change.

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We need protein, obviously, but all we need is 40 grams a day, a training athlete may need 80 grams a day. The average American diet on the other hand contains as much as 200 grams of protein per day, that's bacon and eggs for breakfast, etc.. We all know that the "richer" we became as a civilization and more "advanced", the more meat we eat. Plato knew this in ancient Greece and toward the end of that civilization I'm sure they had all the 'modern' degenerative diseases that plague us today and, "fast foods".

This is a reason postulated for the extinction of the Mayan Indians, their skeletons are demineralized, as if they too had been soaked in excess acid. Maybe toward the end they became so rich they ate Big-Mac Hamburgers too.

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### **The colloid connective tissue organ of schade**

As the blood can not change, it picks up the acids and transports them first to the connective tissues of the body where they are stored. This is the largest organ of the body really and in Europe it is called the colloid connective tissue organ of SCHADE. The collagen fibers of the body are specific acid catchers. It is also called a pre-kidney as that is how it functions, storing acids prior to delivery to the kidneys for excretion. Also it is the organ that connects, holds everything in our bodies in place. It is composed of ligaments, tendons and the like obviously but as these break down into finer and finer fibers it becomes literally the scaffolding that holds every single cell in our bodies in place. If too many acids need storing in this organ, which includes the muscles, inflammation and pain develop. Fibromyalgia is an acid disease for sure.

The space enclosed by these finer and finer fibers, is called PISHINGER'S SPACE, from the German scientist that described it. Essentially, this is the extracellular space that contains the fluids that bathe and feed each and every cell while carrying away the wastes from those same cells. There is no mention of this organ in American, physiology text books, there is the extracellular space but no organ that stores acids like this, no pre-kidney.

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### **Base flood and base tide**

There is also a daily rhythm to this acid-base, ebb and flow called by Friedrich Sander the Base Flood and Base Tide. The stored acids are mobilized from the connective tissues and Pishinger's Space while we sleep. These acids reach their maximum (base tide) concentration in this fluid, and thereby the urine, at 2:00 AM, so the urine is the most acid at this time. The acid content of the urine directly reflects the acid content of the fluid in Pishinger's Space, the extracellular fluid compartment of the body.

By the time you get up though, in the morning, all the acids consumed and generated the day before should be gone, excreted while you slept, contained in your bladder and ready to be voided when you wake. This first urine should be acid when you get up in the A.M.. The urine pH you should check though is the pH of the urine measured the second time you empty your bladder in the morning as this reflects the pH of the body fluids at that time, in the morning, not the pH of the urine from the night before.

Therefore, your A.M. urine, the second voided specimen after you get up, should be back to about neutral, close to pH 7.00 (pH 6.8 to be exact). Because most everyone is acid, this is hardly ever the case. More and more acids accumulate day after day and chronic, degenerative disease develops as the direct result of the pleomorphic changes that take place in the blood as discussed above. Each day we add to the acids not disposed of the day before.

On the other hand, this Pishinger's Space, becomes most alkaline around 2:00 PM, the Base Flood, as then the most bicarbonate is being generated by the cover cells of the stomach (see below), after lunch and breakfast have been metabolized, actually. If your urine is not alkaline at 2:00 P.M. you are definitely in an acid condition.

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### **BICARBONATE**

In the normal situation, hydrochloric acid is produced by the cover cells of the stomach. Table salt, sodium chloride, is split into hydrochloric acid and sodium bicarbonate. The production of each molecule of hydrochloric acid is matched by the production of an equivalent molecule of sodium bicarbonate

The acid goes into the stomach and the sodium bicarbonate goes into the blood stream and circulates all around, first flushing out the excess acid in the tissues and especially, freeing the collagen fibers and the colloidal connective tissue organ from the adsorbed acids stored there. Any bicarb that is left over, is picked up by the alkaline glands, the liver, pancreas, etc..

Of course, this is why our bodies are most alkaline around 2:00 P.M. . This is after our stomachs have pretty well digested breakfast and lunch. The stomachs have made all the hydrochloric acid they needed for that and the equivalent amount of sodium bicarbonate

needed to neutralize the body and refill the alkaline glands of the body, pancreas, liver, etc.. After those glands digested the breakfast and lunch they need filled up again too! Where does their alkalinity come from? It comes from the blood and from the alkaline food we eat, our fruits and vegetables as will be described below.

An imbalance happens, of course, if enough alkaline food is not eaten and because the sodium bicarbonate generated by the stomach's cover cells, does not all go to the alkaline glands (pancreas, liver, salivary glands and the alkaline glands in the duodenum). On the way through the body to those glands, some of it gets used up by neutralizing acid residues from the previous meal and ones stored in the connective tissue organ from before.

If there is not enough base left over after a meal, enough base to neutralize and clear the acids stored in the connective tissues, a relative base deficiency develops which is again, the latent "acidosis".

When this happens the liver and pancreas don't end up with enough alkaline juices to ensure proper digestion.

Digestion can't proceed without enough of these alkaline juices for the liver and pancreas, etc., so the stomach has to produce more acid, in order to make enough base, ad nauseam, and one can develop stomach ulcers. The ulcer is not the result of too much acid, on the contrary, it is the result of too little base!

The 'excess' acid is there as a necessary by product as the organism has to generate it so more bicarb can be made to satisfy the needs of the liver and pancreas.

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### **REPLACEMENT OF MINERALS**

If minerals are lost because they are excreted with the excess protein acids we consume, we can either cut down on such consumption and/or replace the minerals.

THESE LOST BASE MINERALS CAN ONLY BE REPLACED WITH FRUITS AND VEGETABLES.

We have to eat our fruits and vegetables!

"An apple a day does keep the doctor away."

This is so because the minerals from plants, organic minerals, are the only ones our bodies can use. Organic minerals are much different than the minerals from rocks, inorganic minerals. Sodium from a plant for example, is much different than the sodium from table salt. For the basis of this discussion it would be best to assume that they are not the same at all. You can eat all the table salt you want and the cells themselves can still be sodium or base deficient. The sodium used for building cells has to be organic, from plants and it is the main base mineral we have because there is so much of it. Sodium chloride or table salt serves an entirely different function in the body.

In the same way, calcium from a plant is a lot different from say "Tums for the Tummy". Tums are calcium carbonate or limestone, a ground up rock.

We can't digest rocks, that's what plants do.

We simply don't eat enough fruits and vegetables to compensate for the minerals lost, because of our "rich", fast life diets. If we are BASE DEFICIENT, and most of us are, then our whole body is in a relatively acid condition. That is all there is to it.

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### **LATENT "ACIDOSIS"**

So, in this acid condition we are talking about, we aren't "acidotic" in so many words, rather we are base deficient. This is why 80 or 90 year old, old folks, are shrunk up, little people. They have no mineral stores left. When all the minerals are gone, so are we, our battery runs down.

It is just like a battery. The cells of our body do carry a charge that can be measured as the oxidation/reduction potential of the blood. This energy potential decreases with aging, just as the minerals do. We become more oxidized (so the need for antioxidants). Both things occur because of hyper-proteinization, too much protein.

We aren't acidotic as they say in a hospital, in shock, when things have gone so bad that the very pH of the blood itself begins to change, Code Blue. Rather, in a state of latent "acidosis" we are full of stored acid residues, residues stored in the Pishinger space waiting for a ride out on base minerals that aren't there. This is the latent in latent "acidosis". Blood values have not started to change yet, so the acidosis is stored in the tissues as it were. The tissues are acid but technically this is not an acidosis either as the blood appears normal.

If things get worse, this latent "acidosis" can proceed into what is called a compensated acidosis. This means the blood pH itself still hasn't started to change but other values in the blood have had to change to keep the blood pH the same 7.40 that it is supposed to be. Decompensated acidosis is when the blood pH itself is effected.

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### **Hospital Based Acid / Base Medicine**

As the blood itself begins to be effected the compensated metabolic acidosis of regular medicine is the next to develop. This is when the blood pH begins to be stressed if you will. Compensated means the blood pH really doesn't change, yet. When it begins to change it is no longer compensated, it has become decompensated.

In a compensated acidosis the first event that happens to begin the compensation process is that the breathing rate increases in order to blow off more carbonic acid which helps keeps the pH "normal", at 7.4, not lower which is acid. This is revealed in the arterial blood gasses as a lower PCO2 concentration which is the measure of how much carbon dioxide there is in the blood. Carbon dioxide, CO2, combines with water, H2O, to form carbonic acid, H2CO3. Blow off carbonic acid which will lower the carbon dioxide content of the blood and you will increase the pH of the blood. This increased breathing rate happens in diabetic acidosis for the same reason.

Also the plasma bicarbonate level [HCO3-] which is measured as part of the blood gasses, is decreased. Because of the relative base deficiency, the stomach can no longer produce the required amount of stomach acid so the corresponding bicarbonate that should come from the reverse synthesis of the hydrochloric acid, just isn't there.

Also since the sodium and other base minerals are decreased, bicarbonate is actually lost out the kidneys because there aren't enough bases like sodium to connect with the bicarbonate so the kidneys can reabsorb them. This point will be covered more below.

This is the compensated metabolic acidosis of hospital medicine then, low PCO2 concentration, decreased bicarbonate level [HCO3-] with little effect on blood pH yet.

In the type of latent "acidosis" we are talking about there are no changes in the blood gasses. The blood pH, PCO2, [HCO3-], are all normal. The latent "acidosis" we are talking about hasn't developed into the compensated metabolic acidosis described above.

When the breathing rate can no longer get any faster and when the kidneys can no longer increase their function to keep up with the acid load then, the blood pH itself does start to change, it can fall from 7.4 down to 7.2. This is decompensated metabolic acidosis and is a most serious condition. At blood pH of 6.95 the heart relaxes with coma and death.

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#### **Acids that come from outside the body**

The Latent acidosis described above is through the development of exogenous (the problem comes from the outside of the body) base under-nourishment, not eating enough fruits and vegetables and consuming too much acid protein. This of course produces the relative base deficiency that we call "latent acidosis".

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#### **Acids That Come From Inside The Body**

The second way this "latent acidosis" can develop or be aggravated is through the pathological formation of acids in the organism. These are called endogenous acids (come from inside the body).

This frequently happens as a consequence of intestinal fermentation in the intestine, too many of the wrong kinds of bacteria there (see below, Dysbiosis). This can also happen if there is a malfunctioning organ in the body, heart, liver, whatever, a diseased organ, an organ injured in an accident or one inherited that way. Anything that doesn't work right, produces toxic, acid by-products, oxidants.

These acid by-products then can be the end result of the base under nourishment or malfunctioning organs with the symptoms described above or they can be the forerunners of and cause of further degeneration of organs. When this happens there is no more "latent", acidosis. It becomes a frank acidotic condition, compensated to decompensated acidosis, diabetic coma and the like.

With the above scenario come the diseases that call forth, through anomalies of their own metabolism, the more serious acid producing conditions such as diabetes, uremia or kidney failure, hepatic failure, heart failure and other such illnesses. In these conditions the acidosis is only latent in its beginning state.

As the illness progresses, the endogenous (from in the body) production of toxic, metabolic acids quickly becomes worse, attacking not only the alkala-reserve of the body, from the liver, pancreas, etc., but also the alkala-reserve of the blood itself.

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#### **EFFECTS ON DIGESTION Acidification of the intestines**

As we get base deficient, the digestion itself is also effected. The bile from the gall bladder and the digestive juices from the pancreas all have to have a lot of base in them, sodium bicarb actually, to be able to neutralize the stomach acid as it passes out of the stomach and into the intestine and in order to activate the enzymes from the pancreas that require an alkaline medium in which to work. If the acid from the stomach isn't neutralized, colitis or inflammation of the intestine can happen.

As stated above, the main problem with decreased acid in the stomach is that as the cells that make the acid in the stomach make acid, they also make the base, sodium bicarbonate. If these cells don't make enough acid they don't make enough base either.

Again, the sodium bicarbonate/base that is made as the stomach makes its hydrochloric acid is carried by the blood stream to the salivary glands, the gall bladder system, glands in the pylorus (the part of the intestine the stomach is connected to) and the pancreas. These are the alkaline glands of the body and essentially they neutralize the acid contents of the stomach. If there is not enough base to neutralize the acid from the stomach the intestines become acid too. Without enough of this sodium bicarbonate/base for these organs, digestion cannot proceed properly and indigestion occurs.

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### **Dysbiosis**

Also if the pH of the intestines is not right, different bacteria and eventually yeast can grow there, dysbiosis (wrong growth), in place of the bacteria that should be there. This causes its own set of problems.

If the environment of the intestines is not alkaline but acid, dysbiosis (wrong growth) occurs. The gut fills with and supports the growth of the wrong kind of bacteria, fungus, yeast, Candida sp., etc.. These bacteria in turn generate their own acidic, toxic by-products of metabolism that further aggravate and maintain the already latent "acidotic" condition.

When this dys-biosis or wrong growth begins, it begins with fermentation and as fermentation is the process of eating, metabolizing and excreting that bacteria do, alcohol is produced. Fermentation like this can even cause cirrhosis of the liver in patients that have never drunk alcohol in their life.

As when making wine, this fermentation process can go 'bad' and begin to rot. Vinegar and other rotten things are produced. This vinegar acid and the other things can cause "heart burn" too, along with the bloating and gas that come with the fermentation process but this kind of heart burn is not from too much acid, hydrochloric acid, it is from not enough. In this kind of heart burn, that comes an hour or two after you eat, other acids form, acetic acid as in vinegar and other putrefactive acids. These acids cause the "heart" burn. The meal is not digesting well as with a good amount of hydrochloric acid, it is fermenting instead.

These rotten things are reabsorbed back into the body and picked up by the blood like anything in the gut. These rotting things in the gut just don't make you feel well. It's why there are constipation headaches, sleepless nights from food eaten too late to digest (nights where undigested food just ferments and rots all night, makes bad dreams). The skin also tries to expel such toxins, pimples, rashes and other skin problems develop.

With this kind of "heart burn" one hurts after eating, right away or an hour or two later, rather than before as with an ulcer. This can burn with reflux up the esophagus, worse while lying down, or it can be just pressure over the whole abdomen from the gas. This gas can actually push the stomach through the diaphragm into the lung cavity, producing a hiatal hernia. Food also does not help this dys-biotic type of heart burn while it does help the pain of an ulcer especially when the stomach is empty, say at night.

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### **The Indican Urine Test**

Indican is one of these rotten by-products that is formed in the dys-biotic gut and it too is reabsorbed from the intestines, back into the blood stream to be finally excreted in the urine. The Indican Urine Test measures the amount of Indican in the urine. There should be none of course and this test can be used to measure the degree of dys-biosis occurring in a patient.

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### **Digestive Enzymes**

One can live without a stomach. That there is not enough acid to activate some of the digestive enzymes in the stomach is not the real problem as far as this indigestion is concerned. It is because there is not enough base in the liver, pancreas, etc..

Pepsin excreted by the stomach cells needs an acid environment in the stomach to work. Pepsin digests proteins. If there is no acid and no pepsin or if there is ineffective pepsin from the stomach because of no acid (or if there is no stomach) the protein passes into the intestine where the enzyme trypsin from the pancreas does digest it. Trypsin can only work in an alkaline environment. Most of the digestion takes place in the alkaline environment of the intestines, not in the stomach.

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### **Indigestion**

If the food can't be digested properly, too much acid, not enough base, the wrong kind of bacteria in the intestines, whatever, one gets in-digestion, means just what it says. Things just don't digest right. This includes bloating and pressure because if the food doesn't digest, it in fact ferments and then rots. The fermentation part causes gas, the rotting part causes the obvious. Every organ is effected. The body is Wholistic.

This whole process of de-acidification, the use of Balanced Base Powder, recharges the stomach acid system really, like a battery, whether there is too much or not enough acid produced by the stomach cells. When the stomach cells make acid, they split the resulting NaCl or salt into separate sodium and chloride ions and this takes a tremendous amount of energy. Sucking acid out of the stomach with Balanced Base Powder makes the stomach produce more acid and thereby more base, of course, which goes on its merry way into the blood stream ready to clean up acid residues and replenish the alkaline digestive glands.

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### **Increased Acid In The Stomach**

As we know, as one gets acidotic, first the body develops a latent "acidosis". If there is not enough base left over when the hydrochloric acid of the stomach is produced, the relative base deficiency develops, the latent "acidosis", because the liver and pancreas don't have enough alkaline juices.

Digestion can't proceed without enough of these alkaline juices so the stomach has to produce more acid, in order to make just a little more alkaline, basic, juices and nausea. The stomach lining fills up with stored hydrochloric acid, the tissues start to break down from the excess acid, ulcers form and then the *Hylicobacter pylori* bacteria come out of the cells and finish the job, cleaning up the ulcer in the process.

The stomach and its ulcers are one of the body's ways of trying to get rid of acid, through the only acid producing organ in the body, the stomach. By the time an ulcer has formed in the body, Pischinger's Space, all the connective tissues, everything will have become saturated with acid residues. In such a condition the body is trying desperately to rid itself of too much acid.

In the above condition the stomach makes more hydrochloric acid than the body needs just so it can make a little extra bicarbonate for the pancreas and liver. This acid is actually stored in the stomach itself and so this is the "deposit-hydrochloric acid" of Friederich Sander. The following quotes are from, The Acid-Base Household of the Human Organism and its cooperation with the NaCl circulation and the rhythm of the Liver, Friederich F. Sander, about 1930, translated from the German by Robert Miller, D.C. This book is not yet in print in English.

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#### **Deposit Hydrochloric Acid**

The intestines become acid with a base deficiency because, the stomach is pushed to make more base (and as a by-product, more acid). At first, the excess acid made in response to the need for bicarbonate, is actually stored as the deposit-hydrochloric acid in the stomach, causing ulcers, gastritis and the like. Again and more importantly, if the stomach doesn't make acid it doesn't make the base, sodium bicarbonate, which is the more important of the two for digestion. "The real problem here is that of a one sided scenario where regular medicine only views the stomach as a digestive organ, not a depot or deposit organ (for excess acid from the body itself) or as a regulation organ for the Acid-Base Household."

"As soon as one sees the stomach cells also as a deposit-organ, not only a digestive organ, for those hydrochloric acids which are being formed in the cover cells because those cover cells are being forced to produce sodium bicarbonate as a consequence of the base-deficiency of the organism."

When one sees this and then sees that the stomach cells store the excess acid of the body (as do all cells of the body) so that the bicarbonate produced when the HCl was produced, can be used to make up for the bicarb used up in its passage through the body in the blood stream, cleaning up and neutralizing acid 'sludge' all along the way.

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#### **Decreased Acid In The Stomach**

Achlorhydria, Absent or Decreased Acid causes indigestion for sure and is more common than "heart burn" or real over acid production, especially in older folks. As above, this condition begins as the over-stimulation of the cover cells of the stomach, over-stimulated so they can make more bicarbonate for the liver and pancreas because of the underlying latent "acidosis" and relative base deficiency. After awhile the stomach cells just can't do it anymore, make more and more acid while trying to generate more base to correct the base deficiency, the latent acidosis.

The Treatment Of The Over-acid And Under-acid Conditions Is the Same as It Is With Any Other Disease.

#### **TREATMENT IS WHOLISTIC AND GENERIC.**

When the stomach makes too little acid, the whole process of using up the hydrochloric acid in the stomach with the Base Powder does, recharge, the system, makes it work harder and in time better. Digestion improves.

In the over acid condition the Base Powder sucks the excess acid out of the system, the whole system or body. In time the acid residues are cleared and the base deficiency restored so the stomach doesn't have to make so much acid anymore.

In the under acid condition the baking soda stimulates the production of more hydrochloric acid, and therefore blood born bicarbonate, which clears the latent "acidosis", restores the base mineral deficit and the stomach cells can heal. This, in time, really works. Baking soda IVs speed both these processes up considerably. The treatment for both conditions is the same as one is just an extension of the other, the hyperacid condition leading to the condition where little or no hydrochloric acid is produced by the cover cells of the stomach.

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#### **Cows Milk**

This phenomenon of hyper-proteinization is best illustrated by the drinking of milk. Cow's milk has three times as more protein in it than human, mother's milk. It is easy to measure the amount of calcium one puts in one's mouth and the amounts that are passed through the urine and feces. This large amount of protein is converted into acids of course and these acids leach more calcium out of the bones than was provided by the milk in the first place! Cow's milk causes osteoporosis. It is an absolute lie when they say, "Milk builds strong bones". Add to this the fact that 50% of the calcium that is ingested by the drinking of pasteurized milk is not absorbed, just because it is pasteurized. Also pasteurization does not kill all of the bacteria in the milk. Salmonella is transmitted via pasteurized milk as a matter of fact. This all means to me that something that is not right. As far as pasteurized milk is concerned, any farmer knows that if you feed a baby calf pasteurized milk for a few months it will die. We aren't even baby cows.

Add to this that about 80% of people are allergic to milk and it seems to be not such a good food to eat.

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#### **Cholesterol**

These facts are not unknown. In 1977, the senator George McGovern introduced a list of dietary guidelines for the American people. On the top of the list was the recommendation that we decrease our consumption of protein. One year later this was removed from the record by the meat and dairy industries and replaced with the cholesterol scare. Cholesterol is not the problem, protein is.

#### **Protein Is Stimulatory And Is Therefore A Negative Energy Source**

Besides this, in the long run protein is not a positive energy source. Although protein can, in starvation, yield 4 kilo calories per gram of body mass, the same as carbohydrate (compared to 9 kilo calories per gram of body fat) its effect is mainly stimulatory. Next to drugs, pharmaceutical or otherwise, protein is the most stimulating thing we consume. Coffee for example, will get you going for about an hour. A T-bone steak on the other hand will keep you pumped up for four to five hours.

The fact is that, it takes so much energy for the body to process protein, digest it and then eliminate it, that it ends up being a negative energy source, taking more energy from the body than it gives to it. This is the basis of the so called 'high protein', weight reduction diets. You will loose weigh on a high protein diet but the long term consequences of this are untold by those that advertise such procedures.

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#### **Drugs**

As far as acids are concerned, the only things more acid than protein are drugs, all of them. Most drugs are alkaloids that, as with protein, contain nitrogen. These drugs have to be converted first to their corresponding strong acid, nitric acid in this case, and then to the mineral salt, sodium, potassium or calcium nitrate before they can be excreted.

Aspirin, Motrin, all such anti-inflammatory medicines for arthritis, make the arthritis worse in the long run. This is so because the aspirin and the rest are alkaloids which are converted to strong acids in their excretion. Strong acids don't help joints and aching bones. When the body can't deal with the excess acids we consume, one of the places these acids are stored is in the joints. Fluid taken from a swollen joint is always acid

Coffee is a drug, herbal medicines are drugs. All things like these have alkaloids as their active ingredients and are drugs. Pharmaceutical drugs are essentially synthetic alkaloids, made from petroleum.

#### **Over the counter antacid drugs**

Pepcid, Zantac, Axid, Tagamet and the like, block this excess acid outpouring. These drugs stop the acid production of the stomach. This produces only symptomatic relief.

One of the bigger crimes of the petro-chemical drug industry in recent times has been the ease with which these now, over-the-counter, Histamine, H2-blockers can be obtained. These include Tagamet, Pepcid, Zantac, Axid and a host of newer more expensive ones. They are all the same. These drugs block the production of the hydrochloric acid by the stomach, and thereby relieve "acid indigestion".

If one blocks hydrochloric acid production by the stomach with these medicines, where does this excess acid go (it is excess or one wouldn't have an ulcer)? Does the toxic acid then become buried, impregnated in the body somewhere? Does this then proceed on to the Neoplasm phase or does the excess acid just accumulate more in the muscles and tendons, causing you to hurt more or whatever? Do your bones dissolve more or your heart skip more beats, etc., etc.? It takes awhile to know all this, years, so the pharmaceutical companies won't be held libel. As these medicines are relatively new, the side effects of the blocked acid excretion "remain to be seen" as far as regular medicine is concerned.

But, if the problem is, that the body is so full of stored acids that the stomach has to work overtime to get rid of them, then to block the excretion of those acids -- how does that help? Where does that blocked hydrochloric acid go? It aggravates the acid condition that caused its over production in the first place so it has to back up farther in the system. It just puts the acid problem off until later, symptomatic relief.

Still, that you can buy these over the counter now, without a prescription even, is, for lack of a better word, abominable. They shouldn't be used even with a prescription, except in a hospital setting, say with an actively bleeding ulcer where there is no other recourse.

To get at the cause of the excess acid production, rather than blocking it with pharmaceutical H2 blockers, is the obvious and most desirable therapy.

\* \* \*

#### **CHRONIC DEGENERATIVE DISEASE WHAT IS IT?**

The point of all this is, then, that if this condition of "latent acidosis" is not acknowledged, if the above non-specific symptoms are not recognized and dealt with for what they are, then, SPECIFIC DISEASES do develop.

The above GENERIC SYMPTOMS, 'localize' in the body's weakest place, the locus minoris resistentiae, and frank organ degeneration begins to take place.

THE ABOVE IS CHRONIC DEGENERATIVE DISEASE. This "localization in the body's place of least resistance" can take the form of any of the SPECIFIC, NAMED, CHRONIC, DEGENERATIVE, DISEASES THAT THERE ARE.

CHRONIC DEGENERATIVE DISEASE IS WHOLISTIC, IT EFFECTS THE WHOLE BODY.

\* \* \*

AS THIS BASE DEFICIENCY BEGINS TO DEVELOP ALL THE THINGS MENTIONED ABOVE BEGIN TO HAPPEN:

The General Results Of Base Deficiency:

1. The acidity leads to the pleomorphic changes in the blood. As stated above, whenever there is anything in nature that is dying, beginning to decay, something comes and eats it up. When things get old in the body, acid and toxic, organisms do come out of the cells, organisms that devour the old cells they came out of in the first place. In other words, the Protists in the cells change, stick together and become the viruses, bacteria and so on. That is what the microbes, germs, are for.
2. Sodium becomes deficient first from the blood serum (most of the sodium in the body is in the serum whereas the potassium is inside the cells). The acids and even excess protein itself can be, as one of the last resorts, stored in the cells themselves. This causes the cells to swell and edema develops. Of course one is sick by this time. The cells swell in order to dilute the acids in them, the acids that shouldn't be there. High blood pressure can develop because of this.
3. Potassium leaves the cells and weakness, tiredness, and wasting develop. Low blood pressure can be a result of this.
4. Calcium leaves the bones and you have osteoporosis. The bone calcium goes into the blood and you get muscle cramps. The blood has to get rid of the "extra" calcium very quickly or one develops tetany. Tetany is a Charlie Horse type cramp, of every muscle in the body. The body doesn't mess around with calcium, it gets rid of it, deposits it or excretes it. So, why should we, mess around with calcium? It should only be used, as a medicine, in a hospital. All the organic, good calcium that our bodies can use, is contained in the vegetables, especially the dark, green leafy ones. We don't need milk, we don't need extra calcium supplements.

\* \* \*

There are many studies from around the world that show that the more protein a society consumes, the more osteoporosis they have. Osteoporosis is definitely an acid disease. The calcium is just leached out of the bones by these metabolic acids. Calcium, or lack thereof, is not the problem, over acidification is.

This calcium has to be excreted by the kidneys or in the faeces or it will be deposited, somewhere in the body. It can be measured in the urine. It can be deposited in the lining of the arteries, kidney or gallbladder -- stones can develop. It can be deposited in the brain causing dementia or arthritic deposits form, on and on...and then the microbes come out of the acidic, hurt, swollen cells to help get rid of the deposits. Inflammation develops, pain, more swelling, blocked arteries. The amount of calcification in the body correlates directly with the onset of 'old age'. Also, all these old micro-organisms are being re-discovered, inside the diseased tissues effected by Chronic Degenerative Disease, cancer, the bacteria Chlamydia pneumoniae being isolated from the arteries in most cases of hardening of the arteries...Stomach ulcers have been treated for some time with antibiotics. Where is this going? Vaccines and antibiotics for arterial disease that is for sure.

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### **The Symptoms of Being Acid**

<http://www.euroamericanhealth.com/symp.html>

The acidity, the pH of the body, it's fluids and cells, is the most important homeostatic or balancing act the body has to perform. The acidity of the blood has to remain exactly the same all the time. The fact that we are alkaline beings by design but acid generating beings by function makes this the most basic function the body has to perform, no pun intended, besides and including breathing and pumping one's blood around.

As we become more and more acid, accumulate and store more acids in our connective tissues this is what happens;

1. First, there is an increased sense of well being from the "stimulatory" reaction of the bodies regulatory system that operates in high gear to process the excess acid.
2. The patient therefore believes her or his self to be totally well.
3. This type of person tends to be an over achiever, active, always running.
4. The person is overly ambitious due to the acidic irritation of the nerves.
5. Later, as the process progresses the patient becomes;
  - A. Irritable and difficult to please
  - B. Exhausted, fatigued
  - C. Listless and inability to get anything done
  - D. Constantly finds fault
  - E. Sees only the pessimistic side of life
  - F. Can't sleep restfully
  - G. Wakes tired in the A.M.
  - H. Generalized aches and pains
  - I. Loss of appetite or ravenous hunger
  - J. Obstipation (difficulty moving bowels) to constipation
  - K. Gallbladder pains and frequent headaches
  - L. Frequent redness of the nose or parts of the nose
  - M. Hardness and pain of the neck and shoulder muscles with pressure and pain of the back of the

- M Numbness and pain of the neck and shoulder muscles with pressure, and pain of the back of the head nerves with pressure
- N Often coated tongue and halitosis, enlarged tonsils
- O Moist hands with poor blood supply, cold hands, pale to white
- P Tendency to sweat, tendency to development of skin rashes
- Q Susceptibility to colds and bronchitis with large mucous secretions as an attempt to rid the body of acid, the excretion and reaction phases of Homotoxicology
- R Women tend to be pale with scant, heavy or irregular periods
- S Blood pressure tends to be lower at first
- T The Indicin-Test of the Urine (see below) is usually positive. This is a test for rotten products in the intestine that are reabsorbed by the blood stream and re-excreted out the urine when the intestines are in a dys-biotic condition, when abnormal bacteria are growing there because of the latent acidosis
- U Shows aging as the sodium is depleted from the body fluids and potassium from muscles causing wasting and weakness, and then calcium from the bones which is osteoporosis, arthritis and the like.

### URINE AND SALIVA TESTING

<http://www.euroamericanhealth.com/test.html>

This is an old and simple test of urine and saliva that was used extensively before modern blood tests came into existence. The amount of information it provides is considerable and forms a basis that unites all forms of medicine, makes them all work if you will. As stated above, the basic premise is that as societies become more "advanced", protein consumption, fast foods, (not necessarily, fat, cholesterol) become the basic foods. These foods are converted to strong acids which must be eliminated by the kidneys. Every acid molecule that is passed through the kidneys must take a mineral with it so we develop a relative base deficiency, i.e. we become acid. As a result, pleomorphic organisms come out of the blood, out of the cells themselves to clean up the mess. This is chronic degenerative disease.

So, the healing process, no matter what is wrong with you, begins with RE-MINERALIZATION. The only way you can replace these minerals is by consuming fruits and vegetables. You can take mineral supplements but these only work temporarily. These type of minerals are basically ground up rocks and cannot be incorporated into the body cells. Plants can digest rocks, people can't. We have to eat our fruits and vegetables.

This urine/saliva tests shows basically how many minerals are left in our bodies, i.e. what the MINERAL RESERVES of the body are and what we must do to remineralize it. This lays the foundation for any and all healing therapies.

\* \* \*

The test is simple:

1. Saliva test upon waking. First thing in the morning right when you get out of bed, lick and wet the end of an acid test strip with saliva. Note the color change and write down that pH number. Do this before brushing your teeth, drinking, smoking, or even thinking of eating any food. This pH should be 6.8.
2. Then test your second urine of the morning. The urine stored in your bladder during the night, that is ready to be eliminated when you get up, should be acid so you don't want to test that. Drain your bladder in the morning, the last time you get up if you get up during the night and then see what that urine pH is. Again, record this number. This number should be the pH of your urine after you got rid of your acid load from the day before. The acids should be gone the second time you go to the bathroom so your urine pH should be around 6.8 also.
3. Eat breakfast, an apple will do, anything, and five minutes after breakfast check your saliva again. Write this number down also. This number should go up from what it was before you ate, the more the better.
4. Then check your urine pH between meals, i.e. between breakfast and lunch and between lunch and dinner. The pH should always be 7.0 to 8.5, a couple of hours after meals.

These five tests show the following:

1. How well your digestive system dealt with what you ate the night before, i.e. the AM urine pH. These numbers may change from day to day depending on what you did eat the night before.
2. How well we treat ourselves in general, i.e. how "strong" the liver is. This is the AM saliva pH. This number shows the overall state of our health, the condition of the alkaline reserve of our bodies which reflects the diet we have eaten over the last months to years. This number stays rather constant and will only change after some work has been done in re-mineralizing the body. Since the saliva pH is an indicator of intracellular pH, saliva pH readings should never be below the pK of the phosphate buffer system, 6.8. (see below).
3. The most accurate reading of saliva pH is recorded immediately upon awakening--after sleeping at least five hours and before brushing the teeth. It is during sleep that the body removes waste and is in an anabolic state restoring and replenishing the body. If the patient has a saliva pH of 5.5 at this time and only 5.6 after eating, you know that this person has no alkaline reserve and that his body is devoid of the minerals necessary to process food properly--his body cannot adequately respond to the physiological crisis of handling food.
4. The pH of your saliva after you eat gives an indication of what the mineral reserves of your body are (the pH number should increase after you eat). My son just thought of a lemon for a minute and the pH of his saliva went up a whole point. He had enough reserve minerals, which are basic, to pull into his digestive system to begin the digestive process. The ideal saliva pH pattern is 6.8 on awakening, 7.0 before eating and 8.5 following breakfast.
5. Besides just thinking of a lemon one can eat one. This is a simple test that can be done at most any time of the day. It too checks the adequacy of the alkaline reserve of the body. When a healthy person with adequate alkaline reserves takes a bite of highly acid lemon, the saliva pH drops sharply for an instant but returns almost immediately to pH 8.5. The more acidic the food that is eaten, the more rapid the response of the alkaline reserve, and the higher the saliva pH should be following a meal.
6. The pH's of the urine between meals should be kept in the basic range, pH 7.0 to 8.5. After one eats, the stomach generates the necessary acid to digest the food. While doing this, it also performs the opposite action, i.e. it makes an equivalent amount of base or baking soda, sodium bicarbonate, that is picked up by the blood stream and delivered to the alkaline glands of the body, the saliva, the pancreas and the liver. The maximum amount of base in the blood and therefore in the urine occurs one to two hours after you eat.

This rhythm of the acid and base flow of the body, is called by Frederick F Sander, the Base-floods and the Base-tides of the Acid-

Base household. This information is from, The Acid-Base Household of the Human Organism and its cooperation with the nail circulation and the rhythm of the Liver, Frederick F. Sander, about 1930, translated from the German by Robert Miller, D.C. This book is not yet in print in English.

Actually the body fluids and therefore the urine is most acid at 2:00 A.M. (pH 5.0 to 6.8) in the morning (the base tide) and most alkaline at 2:00 P.M. (pH 7.0 to 8.5) in the afternoon (base flood).

"The ideal pH numbers depend on the time of day. Plotted on a curve it looks like the double hump of the back of a camel. Two times a day the urine should be alkaline and that is the top of the humps and corresponds to 10 A.M. and 2 P.M., the alkaline tide after meals. During the rest of the day the pH should be between 6.6 and 6.8. This is optimal urine. The first urine in the morning should be more acidic because of the decalcification that takes place during the night."

If all the acids are not all flushed out during the night they accumulate, day after day. It hurts for one thing and the cycle of chronic disease begins. It effects different people in different ways; heart disease in one, arthritis, osteoporosis, stones, ulcers, cancer, in others.

If what you are doing to get better isn't working, if you are sick, be it with modern allopathic medicines or any of the alternative, complementary therapies, it is probably because you haven't dealt with this acid problem, first.

Definitely, this puts the responsibility of caring for one's own health back into a patient's hands. It guides your therapy and shows you if what you are doing is working or not.

You do the above tests a month or so after you did the initial ones. The numbers should be less acid, if you are doing the right thing. If not, you and your doctor should, re-consult. It all takes time.

\* \* \*

### Simple pH Indicator Solution

A simple way to prepare a pH indicator, instead of using pH strips, is to use the spice, Turmeric. Turmeric is a yellow powder but in a basic solution it turns a ruby red color. Actually, it turns color right at a pH of 6.8. the pH that the urine and saliva should be, most of the time.

To prepare this pH indicator solution you just add a teaspoon of Turmeric to a pint of rubbing alcohol. Shake it up and let it settle.

To use it pour some of the yellow, alcohol/Turmeric solution into a test tube or similar container. A small drinking glass will do. Add a few drops of urine or saliva and if it turns red it means that whatever was added had a pH greater than 6.8, that it was alkaline. If it stays yellow the pH is acid, less than 6.8, need more fruits and vegetables.

If your urine is acid you need Base Powder. You take enough Base Powder so that the Turmeric solution stays red most of the time. After awhile it will stay red all by itself and then you will know what it means to be in pH balance. You will simply just feel good.

## THE TREATMENT OF BEING ACID

### CAUSAL THERAPY FOR LATENT ACIDOSIS

<http://www.euroamericanhealth.com/treat.html>

Getting at the cause, the Causal Therapy for the removal of the deposit-hydrochloric-acid consists then of removing this excess acid from the organism while decreasing the intake of protein acids. This Causal Therapy can be done basically in two ways; by adding bases (sodium, potassium bicarb etc.) or by removing acid.

#### 1. The first thing to do obviously is to cut down protein consumption.

Proteins are:

- Eggs,
- All meats (it doesn't matter if it is beef, fish or chicken),
- All dairy products,
- Lots of grains, beans (a handful of kidney beans for example has a much protein in it as a lamb chop) and cereals (oatmeal is one of the highest protein containing foods), and
- Nuts.

**2. Increase the intake of fruits and vegetables.** An "apple a day does keep the doctor away". Protein depletes us of our main minerals; sodium, potassium, magnesium, calcium and chloride. These are the main ones so they are called macro-minerals, because we need a lot of them. In the final analysis, we must get from fruits and vegetables.

**3. Balanced Base Powder** One can take, by mouth, the necessary quick bases (sodium and potassium bicarbonate, both macro minerals that the body needs a lot of) that the body needs to neutralize the stored acids in the body and correct the relative base deficiency, correct the "latent acidosis". This is what the Balanced Base Powder does. This powder also provides the necessary chloride ions in the form of Celtic sea salt and potassium chloride that are needed to recharge the hydrochloric acid producing ability of the stomach, and thereby and more importantly, the sodium bicarbonate producing ability of the same.

Take 1/2 to 1 teaspoon in water or juice between meals of Balanced Base Powder or, if this is not available, use the same amount of baking soda in water or fruit juice, between meals and before bed, i.e. three times a day.

The important thing is to take it on an empty stomach, so it can suck out the excess "deposit acid" from the acid producing cells lining the stomach (thereby generating more bicarbonate which goes into the blood stream) and not interfere with the acid that is needed at the times of eating. One needs acid in the stomach to digest food obviously so the Balanced Base Powder or baking soda should not be taken around meal times.

If you eat breakfast at 8:00 A.M. and lunch at noon then you would take the first dose of Base Powder at 10:00 A.M., the same between lunch and dinner. It is best to sip it even, so it can suck out acid from the stomach over a longer time, not all at once as with one big gulp. If there isn't time to sip it, just drink it anyway. This, done consistently, over time, is what makes the difference.

It is best not to eat before you retire at night. If you don't eat before bed time then you can take 1/2 to 1 tsp. of Base Powder before bed also. If you do eat before bed then you would not take the Base Powder that night.

To determine the amount of Base Powder you should take you should check your urine pH at the same times as you would take the Base Powder (don't take the Base Powder and check your urine on the same day), i.e. between meals, say at 10:00 A.M. or 2:00 P.M.. The urine should be kept at a pH of 7.0 to 8.0 at all such times. If it is below this number, i.e. if it still acid then you need more Base Powder. If the pH stays between 7.0 and 8.0 then you can try to decrease the amount of powder.

It is not necessary to check these pHs often, the pH of the urine at 10:00 A.M. and 2:00 P.M., once every week, month, is sufficient. It took a long time for us to become acid, for the connective tissues and cells of the body to become saturated with the stored acids. For the same reasons, it will take some time to de-acidify the body, to neutralize and excrete all the stored acids. This process can take one to two years depending on how ill and/or old the patient is. This is not a quick fix as described above, but it will prevent and eliminate the problems that come from being too acid, namely the problems of pleo-morphic, chronic, degenerative disease.

**4. Magnesium** This is another macro mineral that needs replaced. It is not included in the Base Powder because of its laxative effects. Everyone that is in any state of acidosis requires extra potassium and magnesium as these are lost from the urine and cells when acid. The Potassium is in the Base Powder and an easy way to replace magnesium is with Magnesium citrate, obtained from a drug store. It is quite cheap, is a liquid in small pop shaped bottles and is in the laxative section of drug stores. If you drink the whole bottle it will clean you out quite well but instead, take 1 tablespoon upon arising and 1 tablespoon full upon retiring. Minerals are best taken on an empty stomach. After opening the bottle keep it refrigerated and it will be O.K..

**5. Vomiting** Vomiting also rids the body of excess acid. Perhaps old time doctors were justified in their use of emetics, medicines that help you vomit. Emetica (Apomorphine, Ipecac) or any emetic, were frequently used for this purpose and can help. The only problem here is that as the hydrochloric acid (HCl) is expelled, the excess acid (H<sup>+</sup>) ion is eliminated as needed but the chloride (Cl<sup>-</sup>) ion is also eliminated and this can result in a relative chloride deficiency. With vomiting this chloride ion must be replaced. This can be done by taking small amounts of NaCl or table salt.

Making yourself vomit after eating something you 'shouldn't have eaten', is not bulimia, just because you did it. In the process, it does rid the body of the 'dietary indiscretion' along with, excess acid.

**6. I.V. sodium bicarbonate** This is quite simple, harmless and cheap. The simplest form is to add 35 cc of 8.4% Sodium Bicarbonate (70 meq) plus 24 cc of 20% Magnesium chloride (70 meq) in 500 cc of sterile water. This solution is of course isotonic and variations can be made to suite the situation. This can be given over a period of one hour or more. The only problem I have ever had with this is in one patient, in kidney failure (ready for dialysis) and heart failure in which case it was necessary to give him lasix. I would usually give it one time per week, except in very ill patients where it can be given every day. All types of patients were treated with IVs like this. In the condition being discussed, ulcers, in time would just go away.

**7. Take extra micro-minerals or trace minerals too.** There are some ninety of them, gold, silver, and other strange ones. These get depleted also. These trace minerals used to come from plants, as they were in the ground the plants grew in. Most of our farm land has been over farmed with just the replacement of the minerals potassium, phosphorus and nitrogen that are contained in the chemical fertilizers used today. The trace minerals are gone.

There are a few ways to get extra trace minerals. You can use sea salt, Celtic Sea Salt is the best, a little every day. You can also drink a third of a glass of sea water every day. Eating sea-weeds, kelp, spirulina and the like are good as are all sea foods.

Of the trace mineral supplements the liquid ones are preferred. Clark's Minerals is the oldest, least expensive and best of these.

These liquid trace minerals come from the mud of volcanoes. The trace minerals are still present deep under ground. Another way is to fertilize your garden with coal dust. Coal, being crushed dinosaurs and the like, has all the trace minerals in it too.

**8. Drainage Remedies** Use herbal remedies to increase the flow of the excretory organs of the body, namely the kidneys, the liver and the intestinal system, in that order. These organs of course are the organs that have to do the work in eliminating the toxins and acids.

Short of that, we can quit putting toxins into our bodies. But 'we all know that' so really we don't talk about that one. We pay doctors to say they can 'take care of' our indiscretions but personally I feel it has very little to do with medicine.

Pathagoras, after a trying career as a physician which he did also, ended up saying too that the only medicine was good air, diet, exercise etc., etc., etc. Every physician is 'trying', trying to heal, to help yet there is a basic paradox contained in the concept of "healing". Who is kidding who? We, as doctors don't heal anybody. God does that, and the patient sometimes, if they are in the mood. So as doctors we can use less and less harmful 'medicines' at least, more and more natural, less and less expensive - give God and Nature a break. If you don't give a healthy person poison, why would you do that to a sick person? All drugs are poisons, herbal medicines, homeopathics, all of them. If they aren't poisons they are foods.

Tongue in cheek, the kidneys are the most difficult to stimulate and take the longest. Therefore this should be started first and kept up for some time. Herbs that help the kidneys are such things as dandelion (the most specific herb for the kidneys), uva ursi, buchu, horsetail tea (a good mineral tea), juniper berries (a good diuretic), golden rod, asparagus and parsley. Parsley is the food par excellence for the kidneys, it nourishes them specifically. Uva Ursi contains a chemical that is changed by the kidneys, as it passes through them, into phenol as in Lysol. This is a urinary disinfectant and works. Fresh asparagus juice is an excellent diuretic. Solidago is Golden Rod and is for acute and chronic conditions of the renal system, promoting diuresis and excretion of matter usually eliminated with the urine. Bucco is somewhat stronger than Solidago. Horsetail Tea is used in Germany as a diuretic for edema, gout, enuresis, and dysuria and Plantina-Asparagus Tablets (used by Hippocrates as well as Paracelsus for urinary conditions, a good diuretic, for gout, skin conditions etc.) are excellent combination herbal drainage remedies from Marco Pharma, Intl., Specialist in Drainage Remedies, 303-716-1033.

Arginex (arginase enzyme source) is used for kidney overload and is an excellent kidney detoxifying product as is Renafood which combines Arginex with a kidney glandular for regeneration. Take 1 or 2 with meals. These last two products are from Standard Process, 1200 West Royal Lee Drive, Palmyra, WI 53156, 1-800-848-5061.

The liver is the most important detoxifying organ of the body and in most of us needs the utmost attention. Herbs that stimulate the liver to 'clean the blood' are such things as greater celandine, burdock, yellow dock, dandelion, echinacea, barberry, etc. There are liver extracts called liver glandulars and liver liquescences that help regenerate the liver. One can also manually 'pump' the liver by pressing up and under the left, lower rib cage where the liver is. Castor oil packs over the liver area are helpful as is the drinking of lemon juice.

Hepatica (recommended for detoxification of the liver and gall bladder) and Cholenest (gall bladder indications; constipation; stasis of the portal vein; hemorrhoids; hepatopathy with constipation) from Standard Process are herbal tinctures for liver drainage. Herbal Hepatox (Professional Health Products) is an excellent tablet as is Livotrit Plus (Biotics Research, 5801 Biotics Research Drive, Rosenberg, TX 77471, 800-231-5777) and Livaplex (for liver detoxification, fat metabolism and general liver support from Standard Process).

Care of the intestinal system, elimination of foods that one is allergic too and replenishment of the normal bacteria of the intestine is a topic unto itself and will be covered later.

You can also stimulate the skin, which is the fourth largest excretory organ of the body, the kidneys, liver and intestines being the others. While bathing use a Lufa Sponge or rough wash cloth and rub your skin until it gets pink. This gets rid of old skin cells, which are acid deposits, and stimulates the lymph and glands of the skin so they excrete more.

**9. Eliminate Unwanted Toxins** The best way to "eliminate" toxins from the body is to refrain from consuming more of them or avoid exposure to them. These include such things as fluoride in toothpaste and the water, mercury from amalgam fillings in the teeth and exposure to all heavy metals, exposure to pesticides in the food and environment and unnecessary intake of medicines.

Sweating is an excellent elimination process obviously. A simple way besides the obvious ways is to take a hot bath, as hot as you can stand it, for 'awhile', 15 minutes, a half an hour. You can put Baking Soda in the bath, a pound is not too much, along with say, a cup or so of Epsom Salts. These suck acid out of your body and supply Magnesium which is absorbed through the skin. (Epsom Salts are Magnesium sulphate).

Then, get out of the bath and bundle up in clothes, a bath robe, whatever and get under the covers in bed. Lay there for a half hour or so and you will loose a pound of sweat. It is rather amazing and feels extremely good.

**10. Deep Breathing** Protein is not the only source of acids in our body. As stated protein and drugs, alkaloids, produce the hard or strong acids, namely sulfuric, nitric and phosphoric acids.

There are also the weak acids that are produced in the body by the burning of carbohydrates, sugar, fat and the like. Exercise also produces lactic acid, a weak acid, as does stress. These weak acids all work in about the same way. These acids are not eliminated like protein, rather they are broken down into water (eliminated by the kidneys) and carbon dioxide (which is breathed out through the lungs). These soft or weak acids, therefore, do not take minerals with them as protein does. None the less they are acids and can aggravate an already acid condition.

For this reason deep breathing is a very important part of eliminating the acid load of the body. We don't breathe enough. Prana Yoga, becoming one with one's breathing, is a science of breathing. Take slow, deep breaths as often as you think of it, relax. Of course

aerobic exercise helps here too.

**11. Support the lymph system**The lymph system is the detoxifying 'organ' of the body. The lymph comes from the fluid that surrounds the cells and therefore is the fluid that eliminates the toxins and metabolic acids that the cells themselves produce.

**Rebounding**

Rebounding is an old method. This consists these days of bouncing up and down on a trampoline or some such device. This promotes the flow of lymph through the body and therefore helps eliminate unwanted acids and toxins. Massage also does this as does the use of a 'slant board'. You can lay on a board or whatever that puts your feet higher than your head. This helps the lymph flow out of the lower parts of the body. Exercises such as standing on your head do the same thing but many people cannot do this type of thing.

**12. Increase the oxygenation of the body**Oxygen burns, acids, toxins and so on and therefore helps in their elimination. This too is a topic unto itself and will be covered later also but things that can help are products such as Co-enzyme Q-10, herbs containing the ubiquinones and so on.

**13. Stress Reduction**Do this by any means possible. Not to make light of this, but it surely as another topic unto itself. Personally one night without sleep (severe stress for me), makes me extremely acid by the next day.

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